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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,595	07/11/2006	Yumi Muroi	125405	1142
25944 7590 01/22/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
CORNO JR, JAMES A				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
01/22/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/549,595

Applicant(s)

MUROI ET AL.

Examiner

JAMES CORNO

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments, filed October 21, 2008, with respect to the rejection(s) of claim(s) 1-7 under 35 USC 102(b) and 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Guile et al. (EP 677498 A2) and Bonzo (U.S. Patent No. 4,557,773).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guile. Guile teaches a method of selectively plugging the openings of a honeycomb structure by masking the openings, immersing the masked end in a slurry, and pressing the structure down, after which the structure is removed from the slurry and fired. Guile does not teach the step of removing excess slurry from the end of the honeycomb. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to scrape any excess from the end of the honeycomb to reduce waste and to provide a clean end surface.

Regarding claims 2 and 4, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the excess slurry before, during, or after separating the structure from the reservoir with a reasonable expectation of success.

Regarding claim 5, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the slurry before drying it so that the excess may be reused.

Regarding claim 6, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the excess by scraping in order to provide a flat end surface.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guile as applied to claim 1 above, and further in view of Otaka (US Patent No. 4,818,317). Guile does not specifically teach a drying step. Otaka teaches that the plugging material should be dried by hot air immediately after plugging to prevent absorption into the honeycomb structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to dry Guile's plugged structure immediately after plugging to prevent absorption into the honeycomb structure.

Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paisley (US Patent No. 4,432,918). Paisley teaches a method of plugging the openings of a honeycomb structure by immersing the end in a slurry and pressing down

so the honeycomb contacts the bottom of the container (see Fig. 2b), after which the structure is removed from the slurry and allowed to dry.

Paisley does not teach the step of removing excess slurry from the end of the honeycomb. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to scrape any excess from the end of the honeycomb to reduce waste and to provide a clean end surface.

Regarding claims 2 and 4, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the excess slurry before, during, or after separating the structure from the reservoir with a reasonable expectation of success.

Regarding claim 5, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the slurry before drying it so that the excess may be reused.

Regarding claim 6, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the excess by scraping in order to provide a flat end surface.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paisley as applied to claim 1 above, and further in view of Otaka. Paisley does not specifically teach a step of drying by heat or air. Otaka teaches that the plugging material should be dried by hot air immediately after plugging to prevent absorption into the honeycomb structure. It would have been obvious to one of ordinary skill in the art at the time of the

invention to dry Paisley's plugged structure immediately after plugging to prevent absorption into the honeycomb structure.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Guile in view of Bonzo or Paisley in view of Bonzo. Guile teaches a method of selectively plugging the openings of a honeycomb structure by masking the openings, immersing the masked end in a slurry, and pressing the structure down. Paisley teaches a method of plugging the openings of a honeycomb structure by immersing the end in a slurry and pressing down so the honeycomb contacts the bottom of the container (see Fig. 2b), after which the structure is removed from the slurry and allowed to dry. Neither Guile nor Paisley teaches the step of removing the excess slurry from the end of the structure. However, Bonzo teaches excess slurry should be wiped away from the ends of honeycomb structure when selectively plugging openings. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the cleaning method of Bonzo to the plugging method of either Guile or Paisley in order to maintain the exterior shape of the honeycomb structure.

Regarding claims 2, 4, and 6, Bonzo teaches that the excess slurry may be scraped away while the openings are being plugged.

Regarding claim 5, Bonzo teaches that the slurry should be removed before firing.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over either of Guile in view of Bonzo or Paisley in view of Bonzo as applied to claim 1 above, and further in view of Otaka. Neither Guile nor Paisley specifically teaches a step of drying by heat or air. Otaka teaches that the plugging material should be dried by hot air immediately after plugging to prevent absorption into the honeycomb structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to dry Paisley's plugged structure immediately after plugging to prevent absorption into the honeycomb structure.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over either of Guile in view of Otaka or Paisley in view of Otaka. Guile teaches a method of selectively plugging the openings of a honeycomb structure by masking the openings, immersing the masked end in a slurry, and pressing the structure down. Paisley teaches a method of plugging the openings of a honeycomb structure by immersing the end in a slurry and pressing down so the honeycomb contacts the bottom of the container (see Fig. 2b), after which the structure is removed from the slurry and allowed to dry. Neither Guile nor Paisley specifically teaches a step of drying by heat or air. Otaka teaches that the plugging material should be dried by hot air immediately after plugging to prevent absorption into the honeycomb structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to dry a plugged honeycomb structure immediately after plugging to prevent absorption into the honeycomb structure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES CORNO whose telephone number is (571)270-5829. The examiner can normally be reached on Monday-Thursday 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melvin Curtis Mayes can be reached on 571-272-1234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES CORNO/
Examiner, Art Unit 1793

JC
January 18, 2009

/Melvin Curtis Mayes/
Supervisory Patent Examiner, Art Unit 1793